

STS-107 MISSION MANAGEMENT TEAM (MMT) MINUTES

Friday, January 17, 2003

The MMT was convened by the chairman, Ms. Linda Ham at 8:00 a.m. CST. All members were in attendance at JSC or via teleconference.

Mr. Phil Engelauf of the Mission Operations Directorate (MOD) reported that the crew's sleep time was adjusted by an hour as discussed prelaunch. The orbit altitude is 2 nm higher than the preflight plan and communications Acquisition of Signal (AOS) times will be shifted by approximately one minute per day. SPACEHAB is experiencing a ground Ku Channel 2 data receipt problem. SPACEHAB Ku Channel 3 data downlink is working nominally. Orbiter Ku Channel 2 functionality has been confirmed and a payload ground systems problem is suspected. MOD resources will be available to support troubleshooting and testing. The O₂ cryo tank # 7 "A" heater did not come on in manual mode and may be failed. The "B" heater is operating properly. Cryo management may be adjusted to expedite the consumption from this tank. The cryo margin is currently 22 hours due to payload or spacehab power usage well below pre-launch predictions.

Mr. Don McCormack, Shuttle MER Manager, reported a failure of ICOM B in the SPACEHAB module and that the crew was using ICOM A for Orbiter-to-SPACEHAB communications. During the pre-launch and post-insertion time period, AC2 phase B exhibited sluggish current increase during motor operation on three motors. The first occurrence was noted at T-31 seconds, and the second and third occurrences were noted post-insertion. AC2 phases A and C increased to their expected values, but phase B increased to about half of expected value, then recover to the expected value within about a second. The affected motors are: vent doors 8 and 9, Ku-band deploy motor 2, and port payload bay door open motor 2. There was no impact to motor drive times. There is no common circuit breaker or motor control assembly. All other motor signatures analyzed were nominal, some of which are powered from the same circuit breaker or motor control assemblies as the affected motors. Regarding the O₂ cryo tank # 7 "A" heater anomaly, Mr. McCormack noted that flight rules state that with the loss of a tank heater, that tank should be used until the remaining consumables from the other tanks support nominal EOM+2 days. However, CG concerns for early EOM call for tanks 4 and 5 to be depleted first and those tanks are currently being used.

Ms. Vanessa Ellerbe, STS-107 Flight Manager, reported that all SPACEHAB and FREESTAR payloads that are activated are operating nominally.

Mr. Robert Cabana of Flight Crew Operations reported that from the crew perspective this was a good launch and there were no issues to report.

Mr. Loren Shriver representing United Space Alliance reported that the Mission Control Center was operating nominally and that during SRB recovery, buckling damage was noted on the left forward skirt.

KSC Shuttle Processing confirmed the SRB skirt buckling damage and expected hardware arrival later this evening at KSC for further assessment on Monday. The launch film revealed no significant items.

Ms. Ham closed the meeting and announced the next MMT meeting is scheduled for Tuesday, January 21, 2003 at 8:00 a.m. CST.

Original signed by: Frank Moreno

Mr. Frank Moreno

STS-107 Lead Payload Integration Manager

Original signed by: Linda Ham

Ms. Linda Ham

Chairman, Mission Management Team